

the crane/derrick to the vessel/flotation device with chains, or other methods of physical attachment.

(ii) *Option (2)—Corralling.* The crane/derrick is prevented from shifting by installing barricade restraints (*i.e.*, a corralling system). Employers must ensure that corralling systems do not allow the equipment to shift by any amount of shifting in any direction.

(iii) *Option (3)—Rails.* The crane/derrick must be prevented from shifting by being mounted on a rail system. Employers must ensure that rail clamps and rail stops are used unless the system is designed to prevent movement during operation by other means.

(iv) *Option (4)—Centerline cable system.* The crane/derrick is prevented from shifting by being mounted to a wire rope system. The employer must ensure that the wire rope system meets the following requirements:

(A) The wire rope and attachments are of sufficient size and strength to support the side load of crane/derrick.

(B) The wire rope is attached physically to the vessel/flotation device.

(C) The wire rope is attached to the crane/derrick by appropriate attachment methods (such as shackles or sheaves) on the undercarriage, and that the method used will allow the crew to secure the crane/derrick from movement during operation and to move the crane/derrick longitudinally along the vessel/flotation device for repositioning.

(D) Means are installed to prevent the crane/derrick from passing the forward or aft end of the wire rope attachments.

(E) The crane/derrick is secured from movement during operation.

(v) The systems/means used to comply with Option (1), Option (2), Option (3), or Option (4) of this section are designed by a marine engineer, registered professional engineer familiar with floating crane/derrick design, or qualified person familiar with floating crane/derrick design.

(6) *Exception.* For mobile auxiliary cranes used on the deck of a floating crane/derrick, the requirement specified by paragraph (n)(5) of this section to use Option (1), Option (2), Option (3), or Option (4) does not apply when the

employer demonstrates implementation of a plan and procedures that meet the following requirements:

(i) A marine engineer or registered professional engineer familiar with floating crane/derrick design develops and signs a written plan for the use of the mobile auxiliary crane.

(ii) The plan is designed so that the applicable requirements of this section are met despite the position, travel, operation, and lack of physical attachment (or corralling, use of rails or cable system) of the mobile auxiliary crane.

(iii) The plan specifies the areas of the deck where the mobile auxiliary crane is permitted to be positioned, travel, and operate, and the parameters and limitations of such movements and operation.

(iv) The deck is marked to identify the permitted areas for positioning, travel, and operation.

(v) The plan specifies the dynamic and environmental conditions that must be present for use of the plan.

(vi) If the dynamic and environmental conditions in paragraph (n)(6)(v) of this section are exceeded, the mobile auxiliary crane is attached physically or corralled in accordance with Option (1), Option (2) or Option (4) of paragraph (n)(5) of this section.

(7) The barge, pontoons, vessel or other means of flotation used:

(i) Are structurally sufficient to withstand the static and dynamic loads of the crane/derrick when operating at the crane/derrick's maximum rated capacity with all anticipated deck loads and ballasted compartments.

(ii) Have a subdivided hull with one or more longitudinal watertight bulkheads for reducing the free surface effect.

(iii) Have access to void compartments to allow for inspection and pumping.

§ 1926.1438 Overhead & gantry cranes.

(a) *Permanently installed overhead and gantry cranes.* The requirements of § 1910.179, except for § 1910.179(b)(1), and not the requirements of this subpart CC, apply to the following equipment when used in construction and permanently installed in a facility: overhead and gantry cranes, including

semigantry, cantilever gantry, wall cranes, storage bridge cranes, and others having the same fundamental characteristics.

(b) *Overhead and gantry cranes that are not permanently installed in a facility.*

(1) This paragraph applies to the following equipment when used in construction and not permanently installed in a facility: Overhead and gantry cranes, overhead/bridge cranes, semigantry, cantilever gantry, wall cranes, storage bridge cranes, launching gantry cranes, and similar equipment having the same fundamental characteristics, irrespective of whether it travels on tracks, wheels, or other means.

(2) The following requirements apply to equipment identified in paragraph (b)(1) of this section:

(i) Sections 1926.1400 through 1926.1414; §§1926.1417 through 1926.1425; §1926.1426(d), §§1926.1427 through 1926.1434; §1926.1437, §1926.1439, and §1926.1441.

(ii) The following portions of §1910.179:

(A) Paragraphs (b)(5),(6),(7); (e)(1),(3),(5),(6); (f)(1),(4); (g); (h)(1),(3); (k); and (n) of §1910.179.

(B) The definitions in §1910.179(a) except for “hoist” and “load.” For those words, the definitions in §1926.1401 apply.

(C) Section 1910.179(b)(2), but only where the equipment identified in paragraph (b)(1) of this section (§1926.1438) was manufactured before September 19, 2001.

(iii) For equipment manufactured on or after September 19, 2001, the following sections of ASME B30.2–2005 (incorporated by reference, *see* §1926.6) apply: 2–1.3.1; 2–1.3.2; 2–1.4.1; 2–1.6; 2–1.7.2; 2–1.8.2; 2–1.9.1; 2–1.9.2; 2–1.11; 2–1.12.2; 2–1.13.7; 2–1.14.2; 2–1.14.3; 2–1.14.5; 2–1.15.; 2–2.2.2; 2–3.2.1.1. In addition, 2–3.5 applies, except in 2–3.5.1(b), “29 CFR 1910.147” is substituted for “ANSI Z244.1.”

§ 1926.1439 Dedicated pile drivers.

(a) The provisions of subpart CC apply to dedicated pile drivers, except as specified in this section.

(b) Section 1926.1416(d)(3) (Anti two-blocking device) does not apply.

(c) Section 1926.1416(e)(4) (Load weighing and similar devices) applies only to dedicated pile drivers manufactured after November 8, 2011.

(d) In §1926.1433, only §§1926.1433(d) and (e) apply to dedicated pile drivers.

§ 1926.1440 Sideboom cranes.

(a) The provisions of this standard apply, except §1926.1402 (Ground conditions), §1926.1415 (Safety devices), §1926.1416 (Operational aids), and §1926.1427 (Operator qualification and certification).

(b) Section 1926.1426 (Free fall and controlled load lowering) applies, except §1926.1426(a)(2)(i). Sideboom cranes in which the boom is designed to free fall (live boom) are permitted only if manufactured prior to November 8, 2010.

(c) Sideboom cranes mounted on wheel or crawler tractors must meet all of the following requirements of ASME B30.14–2004 (incorporated by reference, *see* §1926.6):

(1) Section 14–1.1 (“Load Ratings”).

(2) Section 14–1.3 (“Side Boom Tractor Travel”).

(3) Section 14–1.5 (“Ropes and Reeving Accessories”).

(4) Section 14–1.7.1 (“Booms”).

(5) Section 14–1.7.2 (“General Requirements—Exhaust Gases”).

(6) Section 14–1.7.3 (“General Requirements—Stabilizers (Wheel-Type Side Boom Tractors)”).

(7) Section 14–1.7.4 (“General Requirements—Welded Construction”).

(8) Section 14–1.7.6 (“General Requirements—Clutch and Brake Protection”).

(9) Section 14–2.2.2 (“Testing—Rated Load Test”), except that it applies only to equipment that has been altered or modified.

(10) In section 14–3.1.2 (“Operator Qualifications”), paragraph (a), except the phrase “When required by law.”

(11) In section 14–3.1.3 (“Operating Practices”), paragraphs (e), (f)(1)—(f)(4), (f)(6), (f)(7), (h), and (i).

(12) In section 14–3.2.3 (“Moving the Load”), paragraphs (j), (l), and (m).